

CLAIM AMENDMENTS

1. (Withdrawn) A method of producing a lightning diverter for conducting a lightning-induced electrical current and to be placed on structures such as wings on wind turbines, aircraft components, radomes and the like with the purpose of lightning protection where the method comprises the steps of:

making of a plurality of holes (102) in a plate (101) of an electrically conductive material,
filling said holes (102) at least partly with one or more electrically non-conductive materials,

dividing the plate (101),

thereby obtaining a layer of electrically non-conductive material (201) with a plurality of isolated segments of electrically conductive material (105).

2. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the plate is divided into strips (103).

3. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the holes (102) in the plate (101) are made by cutting, preferably by laser cutting.

4. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the holes (102) in the plate (101) are made by punching.

5. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the electrically conductive material is preferably a metal.
6. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the electrically non-conductive material is preferably an adhesive.
7. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the holes (102) in the plate (101) are at least partially filled by pressing the plate (101) down into a layer of electrically non-conductive material (201).
8. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the method further comprises applying a layer of material (501) increasing the stiffness of the lightning diverter in the direction along the strip (103) and a further layer of electrically non-conductive material (502) to the first layer of electrically non-conductive material (301).
9. (Withdrawn) A method of producing a lightning diverter according to claim 1 where the method further comprises applying a double sided adhesive tape (401) to the outermost layer of electrically non-conductive material.

10. (Currently Amended) A lightning diverter for conducting a lightning-induced electrical current and to be placed on structures such as blades on wind turbines, aircraft components, radomes and the like with the purpose of lightning protection,

~~where the diverter comprises~~ comprising:

a layer of electrically non-conductive material (201) with a plurality of isolated segments of electrically conductive material, (105) and

~~where the diverter, viewed from above, [[is]] being~~ characterized in that [[the]] exposed parts of each of said isolated segments have a circumference [[are]] described by a same concave shapes shape.

11. (Original) A lightning diverter according to claim 10 characterized by the diverter being in the shape of a strip (103).

12. (Previously Presented) A lightning diverter according to claim 10 characterized by a number of the isolated segments (105) being cross-shaped.

13. (Previously Presented) A lightning diverter according to claim 10 characterized by a number of the isolated segments (105) being star-shaped.

14. (Previously Presented) A lightning diverter according to claim 10 characterized by comprising a layer of material (501) increasing the stiffness of the lightning diverter in the direction along the strip (103).

15. (Previously Presented) A lightning diverter according to claim 10 characterized by comprising an outermost layer of double sided adhesive tape (401).

16. (Previously Presented) A lightning diverter according to claim 10 characterized by the segments (105) being preferably made of metal.

17. (Previously Presented) A lightning diverter according to claim 10 characterized by the electrically non-conductive material (201) being preferably made of an adhesive.

18. (Withdrawn) A blade for a wind turbine, the blade comprising a fiber reinforced blade shell (1001) and means for grounding a lightning-induced electrical current, where the blade is equipped with at least one diverter strip (103), wherein said at least one diverter strip (103) is produced by a method comprising the steps of:

- a) making of a plurality of holes (102) in a plate (101) of an electrically conductive material,
- b) filling said holes (102) at least partly with one or more electrically non-conductive materials,
- c) dividing the plate (101),

thereby obtaining a layer of electrically non-conductive material (201) with a plurality of isolated segments of electrically conductive material (105).

19. (New) The diverter of claim 10, wherein the isolated segments have corners shaped to facilitate a jumping of lightning current between isolated segments.

20. (New) The diverter of claim 10, wherein said diverter, when subjected to a lightning strike, forms an ionized channel of air above the exposed parts of the isolated segments into which the lightning strike is diverted.
21. (New) The diverter of claim 10, wherein each of the isolated segments are arranged in a juxtaposed configuration.
22. (New) The diverter of claim 11, wherein the isolated segments on said strip have rounded internal corners and sharp external corners for lowering spark-over voltage and lift-off capacity.
23. (New) The diverter of claim 22, wherein each of the isolated segments are arranged in a juxtaposed configuration on said strip.
24. (New) The diverter of claim 23, wherein a gap between adjacently positioned isolated segments is sized to lower a spark-over voltage.
25. (New) The diverter of claim 24, wherein said diverter, when subjected to a lightning strike, forms an ionized channel of air above the exposed parts of the isolated segments into which the lightning strike is diverted.